

Notice of Allowability

Application No.

10/606,660

Examiner

Thinh T Nguyen

Applicant(s)

MURARI ET AL.

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/25/2004.
2. ☒ The allowed claim(s) is/are 1-8 and 21-34.
3. ☒ The drawings filed on 25 June 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

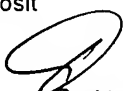
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


David Nelms
Supervisory Patent Examiner
Technology Center 2800

DETAILED ACTION

Examiner's Amendment.

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Change the title to: -- Micromachined Oscillating element, in particular a mirror for optical Switches. --

Reason for allowance

2. Claims 1-8, 21-34 are allowed. The following is an examiner's statement of reason for allowance:

I/ Group I; Claims 1-8:

Claims 1-8 are allowed because none of the references of record teaches or suggests the claimed **MICROMACHINED OSCILLATING ELEMENT, IN**

PARTICULAR A MIRROR FOR OPTICAL SWITCHES having the limitations:

-- " a cavity extending in said intermediate layer, said cavity delimiting laterally

bottom fixed regions and being delimited at the top by said substrate and at the bottom by said semiconductor body; "--

-- " said bottom fixed regions forming fixed electrodes that extend in said intermediate layer towards the inside of said cavity and are staggered with respect to said mobile electrodes. "--

and all other limitations as recited in claim 1.

II/ Group II; Claims 21-29:

The reason for allowance has been given in the Previous Office Action.

III/ Group III; Claims 30-31:

Claims 30-32 are allowed because none of the references of record teaches or suggests the claimed **MICROMACHINED OSCILLATING ELEMENT, IN PARTICULAR A MIRROR FOR OPTICAL SWITCHES** having the limitations:

-- " a second substrate adjacent the intermediate layer, the second substrate including movable electrode regions formed in the second substrate, the movable electrode regions including portions extending into the cavity with the portions being offset relative to the portions of the fixed electrode regions. "--

and all other limitations in claim 30.

IV/ Group IV Claims 32-34:

Claims 32-34 are allowed because none of the references of record teaches or suggests the claimed **MICROMACHINED OSCILLATING ELEMENT, IN PARTICULAR A MIRROR FOR OPTICAL SWITCHES** having the limitations:

-- "a second substrate adjacent the intermediate layer, the second substrate including movable electrodes formed in the second substrate, wherein the movable electrodes are not positioned opposing the fixed electrodes in an at rest condition of the device. "--

and all other limitations in claim 32.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thinh T Nguyen whose telephone number is 571-272-1790. The examiner can normally be reached on Monday-Friday 9:00am-6:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached at 571-272-1787. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9319 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Thinh T Nguyen *TTN*

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David Nelms
Supervisory Patent Examiner
Technology Center 2800